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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/791,480

03/02/2004

Ken Ohmura

KON-1857

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EXAMINER

NOTE, JANIS L

ART UNIT

PAPER NUMBER

1795

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/791,480	<b>Applicant(s)</b> OHMURA ET AL.	
	<b>Examiner</b> Janis L. Dote	<b>Art Unit</b> 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,5-11,13,18 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-11,13,18 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

1. The examiner acknowledges the cancellations of claims 21-26 and the amendment to claim 1 filed on Dec. 11, 2008. Claims 1, 5-11, 13, 18, and 27 are pending.

2. The rejections of claims 1, 5-11, 13, 18, and 21-27 under 35 U.S.C. 112, second paragraph, set forth in the office action mailed on Aug. 11, 2008, paragraph 6, have been withdrawn in response to the amendment to claim 1 and the cancellation of claim 21 filed on Dec. 11, 2008.

The rejection of claims 21-26 under 35 U.S.C. 112, first paragraph, set forth in the office action mailed on Aug. 11, 2008, paragraph 8, has been mooted by the cancellations of claims 21-26 filed on Dec. 11, 2008.

The rejection of claims 21 and 23-26 under 35 U.S.C. 103(a) over the cited prior art, set forth in the office action mailed on Aug. 11, 2008, paragraph 11, has been mooted by the cancellations of claims 21 and 23-26 filed on Dec. 11, 2008.

The rejections under 35 U.S.C. 103(a) of claims 1, 8-11, 13, and 18 over US 5,521,690 (Taffler) combined with Ohmura and of claims 5, 18, and 27 over Taffler combined with Ohmura, Matsushima'647, and Hayashi, set forth in the office action mailed on Aug. 11, 2008, paragraphs 12 and 13, respectively,

have been withdrawn in response to the amendment to claim 1 filed on Dec. 11, 2008. That amendment to claim 1 amends the passing step to read "passing the collected non-transferred toner through a toner immediate chamber, wherein the toner intermediate chamber is provided with a cylindrical or conical structure oriented in a vertical direction which separates paper dust or toner granules toward the bottom of said toner intermediate chamber by utilizing spiraling flow of gas from a gas stream introduced in the intermediate chamber" and adds the step of "transporting the collected non-transferred toner from the toner intermediate chamber by use of the gas stream to the development device so as to reuse the collected non-transferred toner" (emphasis added). None of the cited prior art, in particular Taffler, discloses or suggests transporting the recycled toner with the same gas stream used in forming the spiraling flow. As discussed in the rejection in paragraph 12, page 15, Taffler teaches that the toner in the toner recycling unit **25** is transferred via the suction duct **41** and the toner transport duct **23** to the toner box **16**. See Fig. 1. According to Taffler, "ambient air is sucked in" to recycling unit **25** "via the opened air supply openings **58** and flows through the toner setting space **57** [in the recycling unit **25**] and thus transports

the recyclable toner which has been collected in the toner setting space **57**, via the suction duct **41**, and the toner transport duct **23**, to the toner box **16**." See Fig. 4 and col. 8, lines 48-64. In other words, Taffler uses "ambient air" sucked in to the recycling unit **25** to transport the recycled toner to the toner box in the developing station, not the gas stream introduced in the particle separator **24** that forms the spiraling gas used in the cyclone filter.

The terminal disclaimer filed on Dec. 11, 2008, disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent No. 7,378,208 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Accordingly, the rejections of claims 1, 5, 6-11, 13, 18, and 21-27 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 7,378,208 B2 (Ohmura'208) in view of the other cited prior art, set forth in the office action mailed on Aug. 11, 2008, paragraphs 15-17, respectively, have been withdrawn.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 5-11, 13, 18, and 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Instant claim 1 and claims dependent on claim 1 recite "passing the collected non-transferred toner through a toner immediate chamber, wherein the toner intermediate chamber is provided with a cylindrical or conical structure oriented in a vertical direction which separates paper dust or toner granules toward the bottom of said toner intermediate chamber by utilizing spiraling flow of gas from a gas stream introduced in the intermediate chamber; and transporting the collected non-transferred toner from the toner intermediate chamber by use of the gas stream to the development device so as to reuse the collected non-transferred toner."

The originally filed specification does not provide an adequate written description of the passing step broadly recited in the instant claims. The originally filed specification at page 11, lines 10-15, describes the steps of introducing the collected non-transferred toner by a toner transport tube element **241** into a toner intermediate chamber **242**, mixing the collected non-transferred toner "with a gas returned from development device **4** through gas return tube **245**," and transporting the toner "with the gas to development device **4** via suction produced by air-pump motor **244**." The originally filed specification further describes that the "[g]as return tube **245**, to return gas from development device **4** to toner intermediate chamber **242**, connects between development device **4** and toner supplying intermediate chamber **242**, and gas circulates via toner intermediate chamber **242**." See Fig. 2. The passing step and transporting step recited in instant claim 1 are broader than the steps described in the originally filed specification at page 11 because the instant claim does not recite mixing the collected non-transferred toner in the toner intermediate chamber with a gas returned from a development device via a gas return tube as described in the originally filed specification. Nor does the instant claim recite transporting the mixture of

the collected non-transferred toner and said gas to the development device via a suction produced by an air-pump motor as described in the originally filed specification.

Applicants assert that the support for the passing and transporting step recited in instant claim 1 can be found at page 11, lines 10-15, and page 12, lines 20-22. However, for the reasons discussed above, the disclosure at page 11, lines 10-15, in the originally filed specification does not adequately provide a written description of the passing and transporting steps broadly recited in instant claim 1. Furthermore, the originally filed specification at page 12, lines 20-22, describes the use of a particular toner intermediate chamber **242** shown in Figure 3. According to the originally filed specification, the toner intermediate chamber **242** shown in Figure 3 comprises "a cylindrical housing." The intermediate chamber further comprises a "[t]oner supplying inlet **242a** . . . provided at the upper portion of toner intermediate chamber **242** . . . [a] Gas introducing inlet **242b** . . . provided at the lower portion of toner intermediate chamber **242**, [where] gas is flown in from development device **4** via flexible gas return tube **245** . . . [an] ejecting outlet **242c** . . . provided above toner supplying inlet **242a**,



[where] a mixture of toner and gas is ejected from there toward development device **4** . . . [and] is connected to air pump motor **244** and development **4** via flexible toner transport tube **243**." The particulars of the toner intermediate chamber shown in Figure 3 are not recited in instant claim 1. Nor does instant claim 1 recite that the collected non-transferred toner is mixed with a gas flown in from the development device in the toner intermediate chamber, as described in the originally filed specification. Nor does the instant claim recite ejecting the mixture of the collected non-transferred toner and said gas flown in from a development device from the toner intermediate chamber as described in the originally filed specification.

5. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated

from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L. Dote whose telephone number is (571) 272-1382. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Mark Huff, can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry regarding papers not received regarding this communication or earlier communications should be directed to Supervisory Application Examiner Ms. Sandra Sewell, whose telephone number is (571) 272-1047.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Janis L. Dote/  
Primary Examiner, Art Unit 1795

JLD  
Mar. 19, 2009